

BEST PRACTICES IN CARE FOR PEOPLE WITH CARDIOVASCULAR DISEASES: THE INTERFACE BETWEEN LEADERSHIP AND PATIENT SAFETY*

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ABSTRACT: Descriptive study with a qualitative approach. The objective was to identify best nursing practices and propose improvements in safe care of patients with cardiovascular diseases in a private hospital specializing in cardiology in southern Brazil. The study was conducted from August to October 2015 in the hospital's 3 surgery units; 14 nurses participated. The data collection was performed with semi-structured interviews using content analysis as a framework. Best practices in patient safety and nursing leadership were identified, as well as proposals for improvements in those practices to ensure safe care of patients with cardiovascular diseases. The results showed a need to invest in patient safety culture, nursing team improvements, use of best practices, and upgraded work environments to enhance patient safety.

DESCRIPTORS: Cardiovascular nursing; Nursing care; Leadership; Disease management; Patient safety.

MELHORES PRÁTICAS NO CUIDADO À PESSOA COM DOENÇA CARDIOVASCULAR: INTERFACE ENTRE LIDERANÇA E SEGURANÇA DO PACIENTE

RESUMO: Estudo descritivo, com abordagem qualitativa, que objetivou conhecer as melhores práticas do enfermeiro, bem como propor aprimoramentos no cuidado seguro à pessoa com doença cardiovascular atendida em instituição hospitalar privada especializada em cardiologia no Sul do Brasil. Desenvolvido entre agosto e outubro de 2015, nas três Unidades de Clínica Cirúrgica, com participação de 14 enfermeiros. Coleta de dados realizada através de entrevista semiestruturada e utilizou-se como referencial a Análise de Conteúdo. Foram identificadas melhores práticas nas ações de cuidado ao paciente, melhores práticas de liderança do enfermeiro, e por fim, proposições para o aprimoramento das melhores práticas para o cuidado seguro à pessoa com doença cardiovascular. Há necessidade de investir na cultura de segurança, no aperfeiçoamento da equipe de enfermagem, na utilização de melhores práticas e melhoria dos ambientes de trabalho para o alcance da segurança do paciente.

DESCRIPTORIOS: Enfermagem cardiovascular; Cuidados de enfermagem; Liderança; Gerenciamento clínico; Segurança do paciente.

MEJORES PRÁCTICAS DE CUIDADO A PERSONA CON ENFERMEDAD CARDIOVASCULAR: INTERFAZ LIDERAZGO / SEGURIDAD DEL PACIENTE

RESUMEN: Estudio descriptivo de abordaje cualitativo, con fines de conocer las mejores prácticas del enfermero, así como proponer mejoras en el cuidado seguro a la persona con enfermedad cardiovascular atendida en institución hospitalaria privada especializada en cardiología del Sur de Brasil. Desarrollado entre agosto y octubre de 2015, en las tres Unidades de Clínica Quirúrgica, con participación de 14 enfermeros. Recolección realizada mediante entrevista semiestructurada, utilizándose como referencia el Análisis de Contenido. Fueron identificadas mejores prácticas en las acciones de cuidado al paciente, mejores prácticas de liderazgo del enfermero y, finalmente, propuestas de mejoramiento de las mejores prácticas para el cuidado seguro de la persona con enfermedad cardiovascular. Existe necesidad de invertir en la cultura de seguridad, en la mejora de los ámbitos laborales del equipo de enfermería, en la aplicación de mejores prácticas y mejoramiento de los ambientes laborales para el alcance de la seguridad del paciente.

DESCRIPTORIOS: Enfermería cardiovascular; Atención de enfermería; Liderazgo; Manejo de la enfermedad; Seguridad del paciente.

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● INTRODUCTION

The provision of care to people with cardiovascular diseases is complex and must be executed with quality and without causing unnecessary harm to individuals. Only nurses familiar with best practices related to cardiovascular care can ensure excellent outcomes for these patients⁽¹⁾.

The term “best practices” refers to nursing practices based on the best evidence available from nursing studies. The objective of such practices is to apply the most recent, relevant and useful nursing interventions, based on studies and daily practices⁽²⁾.

Understanding of and respect for best practices enables nurses to think and act more effectively, and helps them systematize the performance of their work, making it clear, defined and coherent, and ensuring quality care, safe practices and patient satisfaction⁽³⁾. Nurses constantly provide direct patient care. Along with nursing teams, they are key figures in avoiding errors and preventing bad decisions, in addition to assuming a leadership role in the advancement and use of strategies promoting quality of care and patient safety⁽⁴⁾.

The expression “patient safety” refers to factors that influence institutions to embrace a patient safety culture, taking best practices into consideration⁽⁵⁾. In healthcare institutions, people with cardiovascular diseases rely on the care of nurses and nursing teams in a variety of ways, ranging from emergency care to invasive procedures. Such situations can often generate adverse events stemming from errors or failures in the provision of nursing care or the execution of care practices, which can endanger the safety of patients.

In 2013, the Ministry of Health, in partnership with the National Health Surveillance Agency (ANVISA), launched the program “Patient Safety and Quality in Health Services,” consisting of six manuals and six basic protocols around the theme of patient safety. These manuals and protocols make it possible to upgrade knowledge by presenting best practices, which can reduce risks and unsafe actions and improve the quality of care provided in healthcare institutions⁽⁴⁾. The present study used these protocols and manuals as a theoretical framework, since they enable determination of the practices that are considered the most relevant and current for ensuring quality of care and patient safety.

It is important to know the best practices that should be adopted by nurses and nursing teams to provide safe care for people with cardiovascular diseases. Adherence to best practices results in better performance, reduces morbidity and mortality, decreases the costs associated with cardiovascular diseases, and contributes to enhanced patient safety⁽⁶⁾.

The objective of the present study was to identify best nursing practices and propose improvements in safe care of patients with cardiovascular diseases in a private hospital specializing in cardiology in southern Brazil.

● METHOD

This was a descriptive study with a qualitative approach. It was conducted in a private hospital specializing in cardiology in southern Brazil from August to October 2015.

The study sites were 3 surgical units (SU); SU1 had 19 hospital beds, and SU2 and SU3 each had 18 beds.

The nursing teams of SU1 and SU3 were 8 nurses and 28 nursing assistants. The nursing team of SU2 was 8 nurses and 8 nursing assistants. On the day shift, 3 nursing assistants took care of patients' basic needs and 1 nursing assistant helped the nurses. The night shift was the opposite; the team was 1 nurse and 3 nursing assistants. The work shifts in the units were 12 hours, followed by 36 hours off.

The inclusion criterion was being a nurse who had been working in the unit at least three months. The exclusion criteria adopted were having worked less than three months in the unit, or being on vacation or leave during the data collection period. Of the 16 nurses working, only 14 participated in the study, since two did not meet the inclusion criterion.

Data collection was performed with semi-structured interviews done in the hospital, consisting of questions regarding patient safety, best practices for safe care and prevention of adverse events for patients with cardiovascular diseases. The interviews were recorded digitally and the participants were interviewed in just one meeting.

The interviews were then fully transcribed and underwent an analytical process based on the content analysis framework. This framework consists of three stages: pre-analysis, exploration of the material, and treatment of the results (inference and interpretation)(7).

Pre-analysis began with reading all the data several times to obtain the overall meaning; this first contact with the data entails what Bardin calls "skimming the text"⁽⁷⁾. The second stage involved exploration of the material or codification, which consisted of defining the categories through codification⁽⁷⁾. The categories were not predetermined; categorization was done manually by grouping the codes which arose, based on the similarities or differences with ideas recommended in international patient safety goals. The last stage involved treatment of the results; the information was condensed and highlighted for analysis, inferences were made, and interpretations were performed⁽⁷⁾. In this stage, 3 categories and 17 subcategories emerged from the data analysis.

To ensure the anonymity of the participants, they were identified with the letters 'NA' for nursing assistants and 'N' for nurses, followed by Arabic numerals, according to the order in which they were interviewed. The study was approved by the Ethics Committee for Research involving Human Subjects of the State Department of Health of Santa Catarina under Protocol No. 1049447.

● RESULTS

The findings indicated an interface between nursing leadership and patient safety in the understanding of best care practices for people with cardiovascular diseases, which will be presented in three thematic categories: "Best practices in patient care," "Best practices in nursing leadership," and "Proposals for improvement of best practices."

Best patient care practices

This category had five subcategories that addressed best care practices in the area of direct relationships between professionals and hospitalized patients.

The subcategory "Checking patient identification" is done by identification bracelets and signs on the beds. When patients arrive in the units, the nurses check their names, along with bracelets and medical charts. According to the nurses, the bracelets and identification on the beds lead to improved communication between nurses and patients, since the names are visible to all professionals, avoiding identification errors.

The patient arrives and we print his or her name and put it over the bed, and there is also the bracelet with the patient's identification [...] So, it's nice when you visit the patient and say the right name, because we don't remember sometimes. Therefore, it's good because you can look up and see the name above the bed. This improved quality and safety; it was essential. (N3)

In the subcategory "Nosocomial infection prevention," there were some elements that were relevant for patient safety. Hand hygiene is fundamental at all times, and tied to this precaution is sterilization of materials.

The nurses reported the practice of preventive isolation for contact precaution. When a patient is suspected of having been infected by multidrug resistant bacteria or comes from another institution, preventive isolation occurs. In such cases, the patient remains in the room, preferably alone, and personal protective equipment needs to be kept next to the bed, along with materials to check vital signs and quaternary ammonium to disinfect materials and furniture. To identify whether a patient is on contact precaution, a "Contact Precaution" sign is placed on the door, stating the necessary precautions for entering the room.

In the subcategory "Checking medications," all the nurses reported that this practice is essential for safe administration of medications, which are supposed to be checked at the time of dispensation in the pharmacy and then checked again when given to patients.

Regarding patients with the same or similar names who are under the care of the same professionals, the participants said that the nurses redistribute the professionals on the shift, so that the same professionals are not caring for these patients at the same time.

When the nurses withdraw medication, I always remind them to put the name and bed separate when they have the same names – especially up here, which is a hospital ward – when they have the same name, such as Maria, John, try to separate the professionals on the shift who will be responsible for them. (N2)

When medications are given, the patient's identification is checked, as well as whether there are any drug allergies. In such cases, the patient is given a bracelet indicating allergies, and this is also marked on the chart in the nursing station and on medical prescriptions.

Some nurses referred to the importance of telling patients which medications will be administered, as well as checking with them about whether they have received those medications before, to encourage patients and family members to participate in the care process.

I think it's important to tell patients to always confirm with us [...] I told the patient which medication I was going to give and then the patient said 'Hey, I don't remember having received that medication before!' Then, when I checked, it wasn't for him, so I didn't give it. Thank God he said something to me. An error was avoided. (NA6)

One of main adverse events reported by the nurses was fall risk. In the subcategory "Identification of fall risk patients and precautions," the nurses presented the profile of patients with this risk in the unit: older people, those who have difficulty walking, those in post-op, those requiring more complex care (dependent on nursing care), and those taking anxiolytics.

To identify fall risk patients, the nurses use a fall risk bracelet and provide patients and family members with fall risk information. This information contains the precautions that patients and family members/companions should take to prevent falls.

Nurses take various precautions to prevent falls, such as: guidelines for patients and family members to enable them to participate in care; patients should always accompanied by a family member or companion; instructions for the nursing staff; safety bed rails raised, bell close to the patient and bed height close to the ground; avoid absence of professionals during procedures; corridors or areas close to the patient kept free of objects that could hinder ambulation; precautions during transport of such patients; shower chair nearby when the patient is showering; daily assessment of the level of consciousness of patients, to identify confusion, delirium or agitation.

Post-op patients, older patients or those who have any problem walking. You need to talk to them, leave the bell nearby, keep the safety bed rails raised, always be available for them and always tell them to call for the nursing team. (NA4)

In the subcategory "Precautions for patients at risk of developing pressure ulcer," it is first necessary to identify patients with this risk. According to the nurses surveyed, older patients who are bedridden, dependent and use diapers or catheters have a higher risk of developing pressure ulcer.

After identifying these patients, prevention measures are taken, such as change of position every two hours, use of pyramidal mattresses (profiled mattresses), massage and skin moisturization, and guidelines for nursing teams. If a patient develops an ulcer, the nurse assesses the sore, and indicates and starts treatment.

Best nursing leadership practices

This category was composed of five subcategories related to nursing leaders ensuring safe care.

The first subcategory, "Comprehensive patient care," indicated that besides being leaders of teams and managing the units, nurses are also responsible for providing direct care to patients. According to the nurses, comprehensive patient care, whether provided only by nurses or by nursing team members, is considered a best practice for safe care. Through comprehensive care, it is possible to get to know patients fully, not just physical aspects, but also identifying actual and potential care needs.

As nurses, we provide comprehensive care [...] Therefore, I like to be present, to see what's happening. Because I know my patients, what they need, how to care for them [...] so that adverse events can be avoided. (NA3)

In the subcategory "Communication as a safe care practice," the nurses noted the importance of communication between teams to prevent adverse events. The nurses referred to the care record in the preparation and handing over of shifts, since there is a protocol in the institution for shift handoffs.

Given the importance of records, the subcategory "Systematization of Nursing Care" (SAE) was deemed relevant to ensuring safe patient care. This process begins with the nursing record, where risks and care needs are identified, followed by the creation of a care plan. The nurses fill out care assessment instruments daily, such as the Braden, Stratify and Care Complexity and Phlebitis scales, which help them to determine the size of teams and patient risk levels and assess interventions based on clinical developments and recommendations, enabling proper care management.

"Work relationships on the team" were seen as a means of reducing adverse events and ensuring safe care through communication, sharing of experiences, mutual help, cooperation and good relations between team members.

The subcategory "Guidance as a safe care practice" was related to instructions that should be given to patients, family members and nursing teams. This is considered a nursing leadership action, and also ensures effective answers to questions, guides nursing teams, empowers family members and patients, and encourages participation in the care process, reducing adverse events and guaranteeing safe care.

As far as guidance [...] always pass on to your colleagues what's happening with your patient. If you suspect something could happen tell the patient as well, instruct the person accompanying the patient [...] anything that can prevent things, any procedure you're going to do, do it well, provide guidance to prevent something from happening, prevention. (NA4)

Proposals for improvement of best practices

The nurses reported that there are possibilities and needs for improvement of best practices for providing safe care for people with cardiovascular diseases, which are presented in seven subcategories.

Under "Safe administration of medications," the nurses referred to the need to implement double-checking of medications at the time of administering them to patients, as well as recording the administration of medications and explaining cases where patients did not accept them.

Under the category "Training of professionals," the nurses said that training and upgrading of knowledge makes professionals feel more valued and motivated, which results in the provision of safer care. Permanent education in this sector is considered a best practice for reducing adverse events. Participation of nurses is essential for identifying training needs and organizing training sessions with teams.

In the subcategory "Adequate staff size and retention of professionals," the nurses said that strategies need to be developed to reduce turnover and review staff size. High turnover (of nursing assistants and nurses) and inadequate staff size give rise to work overload, resulting in quick provision of care without sufficient attention, which can lead to unsafe actions and adverse events.

I think our main problem is turnover [...] Patient safety goes out the window. It's as though we put patients on a firing line. It's difficult! [...] When you're starting something new, it means training, equipping people, but you run a big risk, don't you? (N3)

In the subcategory “Information on patient safety and notification of adverse events,” it was noted that nursing teams are not familiar with the subject of patient safety and adverse events, reporting of these events, and not penalizing mistakes. According to the nurses, measures to prevent adverse events can be intensified by raising awareness.

So, I think it's a matter of training the nursing team, nurses and nursing assistants. Because if you were to ask them, they don't know what an adverse event is and what should be reported. (N2)

In the subcategory “Availability of materials and adequate space for providing safe care,” the nurses reported that materials were either lacking or under maintenance, especially for patients in isolation, and that space was inadequate for providing care, which could hinder care and lead to adverse events.

The subcategory “Cultivate communication between teams and make progress in using the shift handoff protocol” revealed the need to develop communication between professionals, as this is a best practice identified by the nurses. Communication and exchanging ideas enable learning from the experiences of others and improving the care provided.

“Institutionally improve relations with those who accompany patients” is related to people who accompany patients during their stay in the hospital. In the institution, all patients can have companions with them 24 hours a day, and visiting hours in inpatient units are all day long. According to the nurses, this practice is difficult due to concerns about prevention of nosocomial infection. Many of these companions are elderly people who have emotional and health weaknesses, which could hinder their involvement in the care of patients.

● DISCUSSION

The best practices listed in this study coincided with the six International Patient Safety Goals of the World Health Organization and basic protocols set forth in Ordinance No. 529/2013 of the Ministry of Health⁽⁸⁾.

Correct identification of patients is the first international safety goal, and is considered a primary factor in monitoring patient safety, especially for prevention of adverse events⁽⁹⁾. Besides bracelets, the institution also uses identification on the beds as a practice for preventing adverse events.

In relation to safe administration of medications, one area of improvement identified was the need to implement double-checking and recording of the administration of medications. During hospitalization, patients with cardiovascular diseases receive high-alert medications daily that have a higher risk of causing significant harm to patients if mistakes occur during use⁽¹⁰⁾. This highlights the importance of double-checking at the time of dispensation, preparation and administration of such medications, as well as proper recording, which can improve monitoring of patients and therapeutic evaluations.

Nursing teams play an important role in the identification of risk factors related to patients and the environment, which can help prevent adverse events, such as falls and pressure ulcers. The profile of fall risk patients in this study was in line with the literature^(5,11).

As for the pressure ulcer profile, it is important to underscore the need for daily reassessment of the risk developing pressure ulcers, since this practice enables health professionals to adjust their prevention strategies according to patient needs. The participation of multidisciplinary teams and nursing staff in pressure ulcer prevention is essential, since nutritional adjustments may be necessary, or interventions to facilitate patient mobilization or mobility, among other actions⁽¹²⁾.

Besides improving the quality of care provided, the practice of systematic care for patients undergoing cardiac surgery reinforces the importance of nursing actions at all levels of care⁽¹³⁾. Systematization of nursing care is being implemented in care practices and imparts greater patient safety, improves quality of care, and gives nursing professionals autonomy by organizing the work in terms of methods, number of people and adjustment of instruments, and also enables operationalization of the nursing process⁽¹⁴⁾. The use of SAE guarantees personalized and humanized care, focused on basic human needs, in addition to ensuring that there is a patient care plan and guiding the actions of nurses and

nursing teams.

In their management of the care process and the units and as leaders of nursing teams, nurses are central figures in the training and development process for their teams, and must be aware of training needs and implement teaching and learning strategies⁽¹⁵⁾. The participants considered permanent education a best practice for developing knowledge, skills and practices, enabling competent and safe patient care. Guidance and training of personnel are considered important, not only in socialization and the training process, but also to ensure a good work atmosphere for teams and share responsibilities in an integrated manner⁽¹⁶⁾.

In this regard, communication is important as a nursing leadership tool for safe care. Shift handoffs require a communication process among professionals, as well as the transfer of care responsibility. The complexity of the type of information transmitted, the means of communication used and the characteristics of the professionals on the teams have an impact on the effectiveness and efficiency of the transfer of information and, hence, on patient safety⁽¹⁷⁾.

In addition to communication between team members, it is important to look at communication between professionals and patients, family members and companions. This communication should occur in a manner tailored to patients and their situation; that is, nurses should take into account the cultural and linguistic specificities of patients as well as their degree of cognitive development⁽¹⁵⁾. Nurses need to promote communication with patients and family members and companions, seeking to actively include them in the care process and making communication a key element in the provision of care.

Another important factor for ensuring safe care is appropriate staff size, since a lower number of nurses can affect supervision of healthcare service and quality of care, as well as endanger the safety of patients⁽¹⁸⁾. An integrative literature review identified a relationship between reduced nursing staff and increased rates of infection, mortality, falls, ventilator-associated pneumonia, accidental extubation and length of stay⁽¹⁹⁾.

When institutions have appropriately sized nursing staffs and pay attention to training and retention of nurses, the result is quality nursing care that is conducive to prevention and early detection of possible adverse events⁽²⁰⁾.

Finally, patient safety culture must continue to evolve in the institution, since a positive safety culture is associated with the adoption of safe behaviors and fewer adverse events directly related to patient safety⁽²¹⁾. Awareness of patient safety needs to be raised among nursing teams. Adverse events can serve as teaching opportunities and alert staff to the importance of reporting and best practices for prevention and safe care.

● CONCLUSION

The practices presented in the present study are in line with the protocols of the Ministry of Health and other literature, making them relevant safe care practices that are current and appropriate for the situation that was studied.

Although the findings deal with the reality of a private hospital, best practices were identified in direct patient care and the actions of nursing leaders, as well as practices that needed improvement. This can serve to provide support for professionals in similar contexts or guide public managers in the adoption of patient safety-based instruments and resources already used in private institutions.

Patient safety culture must be internalized by professionals. It is also necessary to expand permanent education strategies on the subject, improve processes and working conditions, adjust staff sizes, and understand that family members and companions are co-participants in safe care.

Although the participants in the present study were nurses who met the inclusion criteria, one limitation was that the testimonies of the nursing technicians were not taken into account, since they engage in direct patient care activities.

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diseases (CVD) and cardiovascular risk factors e.g. obesity and diabetes mellitus (DM). According to one retrospective analysis (n = 1,590 from 575 Chinese hospitals), 25% of COVID-19 patients had comorbidities [4]. Arterial hypertension (AH) was recorded in 16.9%, other CVS in 53.7%, and DM in 8.2%. It can be believed that, while ensuring better AH control, RAAS inhibitors can mitigate immune system imbalance in AH [16]. During a virus infection, patients with AH should have their AH and cardiovascular risk monitored. COVID-19 and RAAS inhibitors. Cardiovascular complications often appear after stabilisation and/or improvements in patient's respiratory status [41].

24 Improving Patient Safety by Promoting Best Care with the Use of National Quality Registers and Patient Safety Indicators

Engaging those at the leadership level is critical for patient safety improvements to occur. By providing leaders with effective, evidence-based tools and methods, significant improvements can become reality. Policies must address the everyday realities and challenges on the ground; evidence should be embedded within the safety standards. National safety culture, leadership style, and patient involvement deserves particular attention with regards to the international examination and comparison of patient safety measures.

14 Economy and Efficiency - Patient Safety Measures

The coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 that has significant implications for the cardiovascular care of patients. First, those with COVID-19 and pre-existing cardiovascular disease have an increased risk of severe disease and death. Second, infection has been associated with multiple direct and indirect cardiovascular complications including acute myocardial injury, myocarditis, arrhythmias, and venous thromboembolism. Third, therapies under investigation for COVID-19 may have cardiovascular side effects. Fourth, the response to COVID-19 can compromise the rapid triage of non-COVID-19 patients with cardiovascular conditions.